sdph3.10 or sdp3.5 polypeptides (e.g. SEQ ID NOs:38 or 43) or with irradiated PBLs loaded with synthetic peptides corresponding to the putative proteins and matching the consensus for the appropriate HLA class I molecule to localize the antigenic peptide within the sdph3.10 or sdp3.5 clones (see, e.g., van der Bruggen et al., *Eur. J. Immunol.*24:3038-3043, 1994; Herman et al., *Immunogenetics* 43:377-383, 1996). Localization of one or more antigenic peptides in a protein sequence can be aided by HLA peptide binding predictions made according to established rules for binding potential (e.g., Parker et al, *J. Immunol.* 152:163, 1994; Rammensee et al., *Immunogenetics* 41:178-228, 1995). HLA binding predictions can conveniently be made using an algorithm available via the Internet on the National Institutes of Health World Wide Web site. For example, several predicted HLA binding motifs for the sdph3.10 and sdp3.5 polypeptides (SEQ ID NOs:39 and 44) are listed in the table below:

In the Claims

Please amend the claims as follows. Applicants have attached marked-up claims below, with deletions and additions to the text indicated by bracketing and underlining, respectively.

1. (twice amended) An isolated nucleic acid molecule selected from the group consisting of

(a) nucleic acid molecules which hybridize under stringent conditions to a nucleotide sequence selected from the group consisting of SEQ ID NO:38 and SEQ ID NO:43, and which code for a sarcoma associated gene product,

(b) nucleic acid molecules that differ from the nucleic acid molecules of SEQ ID NO:38 or SEQ ID NO:43 in codon sequence due to the degeneracy of the genetic code, and

(c) complements of (a) and (b),

wherein the isolated nucleic acid molecule excludes nucleic acid molecules consisting of the nucleotide sequence set forth in GenBank accession number AA213817.

40.(amended) A composition comprising:

an antisense nucleic acid which binds to a tumor associated nucleic acid which hybridizes under stringent conditions to a nucleic acid molecule having a nucleotide sequence selected from the group consisting of SEQ ID NO:38 and SEQ ID NO:43, and reduces the expression of the tumor associated nucleic acid.

41.(twice amended) A kit for detecting the presence of the expression of a tumor associated polypeptide precursor which encodes a portion of SEQ ID NO:39, comprising a first isolated nucleic acid molecule consisting of a 12-32 nucleotide contiguous segment of SEQ ID NO:38, and a second isolated nucleic acid molecule consisting of a 12-32 nucleotide contiguous segment of the complement of SEQ ID NO:38, wherein the contiguous segments are nonoverlapping.

43.(thrice amended) A kit for detecting the presence of the expression of a tumor associated polypeptide precursor encoded by SEQ ID NO:43, comprising a first isolated nucleic acid molecule consisting of a 12-32 nucleotide contiguous segment of SEQ ID NO:43, and a second isolated nucleic acid molecule consisting of a 12-32 nucleotide contiguous segment of the complement of SEQ ID NO:43, wherein the contiguous segments are nonoverlapping, and wherein the first and second isolated nucleic acid molecules exclude nucleic acid molecules consisting of segments of the nucleotide sequence set forth in GenBank accession number AA213817.

60.(amended) An isolated nucleic acid molecule selected from the group consisting of

(a) nucleic acid molecules which hybridize under stringent conditions to a nucleic acid molecule having a nucleotide sequence set forth as SEQ ID NO:1, and which code for a sarcoma associated gene product,

(b) nucleic acid molecules that differ from the nucleic acid molecules of (a) in codon sequence due to the degeneracy of the genetic code, and

(c) complements of (a) and (b),

wherein the isolated nucleic acid molecule excludes nucleic acid molecules completely composed of the nucleotide sequence of GenBank accession number W86797.

Remarks

Claims 1, 43 and 60 have been amended to exclude certain prior art sequences represented by GenBank accession numbers AA213817 and W86797. Support for these amendments can be found in the specification in Table VII. Claim 41 has been amended to indicate that the kit is specific for detecting nucleic acid molecules which encode a portion of